

## 1-4. (CANCELED)

5. (NEW) A device for the optimization of hydraulically controlled engagement of marine transmission clutches comprising a pump (10) for delivery of hydraulic fluid from a reservoir (11) to two control pistons (12a, 12b) of said clutches, two solenoid valves (13, 14) arranged between said pump (10) and said pistons (12a, 12b), a bistable valve (15) arranged in parallel between said two solenoid valves (13, 14) and said pistons (12a, 12b), a control valve (16) arranged on a pressure side of said pump (10) toward a discharge line leading to the reservoir (11) and equipped with an adjusting device (17), comprising a spring element (18) that is linked to said bistable valve (15), the optimization device further comprising a shuttle-type sequence valve (19) on a link between the spring element (18) of said adjusting device (17) and one of a supply line of said solenoid valves (13, 14) or said bistable valve (15), the bistable valve (15) is also linked to a hydraulic control (20) of said sequence valve (19), said adjusting device (17) is linked to the pressure side of said pump (10), and a valve (21) arranged in a selected section of the link (22) between said sequence valve (19) and said bistable valve (15) or the link (23) between the sequence valve (19) and said spring element (18) of said adjusting device (17), a function of this valve (21) is to produce a preset pressure drop between the spring element (18) of said adjusting device (17) and the bistable valve (15).

6. (NEW) A device for the optimization of hydraulically controlled engagement of marine transmission clutches comprising a pump (10) for a delivery of hydraulic fluid from a reservoir (11) to two control pistons (12a, 12b) of said clutches, two solenoid valves (13, 14) arranged between said pump (10) and said pistons (12a, 12b), a bistable valve (15) arranged in parallel between said two solenoid valves (13, 14) and said pistons (12a, 12b), a control valve (16) arranged on a pressure side of said pump (10) toward a discharge line leading to the reservoir (11) and equipped with an adjusting device (17), comprising a spring element (18), that is linked to said bistable valve (15), the optimization device further comprises a shuttle-type sequence valve (19) on the a between the spring element (18) of said adjusting device (17) and one of a supply line of said two solenoid valves (13, 14) or said bistable valve (15), the bistable valve (15) is also linked to a hydraulic control (20) of said sequence valve (19), said adjusting device (17) is linked to the pressure side of said pump (10), and a suitable arrangement of lines through which a throttling effect is made possible, a function of the lines is to produce a preset pressure drop between the spring element (18) of said adjusting device (17) and the bistable valve (15).

7. (NEW) The device according to claim 5, wherein the preset pressure drop is technically produced by way of a suitable arrangement of lines, through which a throttling or similar effect is made possible.

8. (NEW) The device for the optimization of hydraulically controlled engagement of clutches used in marine transmissions according to claim 5, wherein it conforms to the descriptions and illustrations on the sketches enclosed.